

reported here. **RESULTS:** Overall, 1,038 respondents (T1DM=466, T2DM=572) completed 3,528 questionnaires. Mean insulin treatment duration was 11.7 years and mean HbA1c was 8.2% (66.2 mmol/mol). Mean NSHE/week was 2.4 (T1DM) and 0.8 (T2DM); 23% (T1DM) and 26% (T2DM) occurred at night. Fatigue and reduced alertness were the commonest sequelae of NSHEs (78% and 51% of respondents, respectively). Effects of nocturnal NSHEs lasted significantly longer than effects of daytime events: T1DM=10.6 vs. 4.9 hours ($p=0.0002$); T2DM=15.3 vs. 5.1 hours ($p<0.0001$). In the week following a NSHE, blood glucose testing increased 12% (T1DM) and 21% (T2DM). In employed respondents (47% of total), 20% of NSHEs caused loss of work-time, which was longer following nocturnal NSHEs: T1DM=2.7 vs. 1.1 hours ($p=0.0184$); T2DM=2.5 vs. 1.6 hours ($p=0.1340$). Over a third of employed respondents experienced difficulty concentrating at work following NSHEs (T1DM=39%; T2DM=44%). Respondents contacted a health care professional (HCP) after 3% (T1DM) and 7% (T2DM) of NSHEs. Overall, respondents rarely or never informed HCPs about NSHEs (T1DM=82%; T2DM=69%). **CONCLUSIONS:** NSHEs are common in adults with insulin-treated diabetes in the UK, and have a negative impact on personal well-being, work productivity, and health care resource use. As they are seldom reported to HCPs, the burden of hypoglycaemia may be underestimated.

PDB130

PATIENTS' PREFERENCES IN ORAL DIABETES TREATMENT: A DISCRETE CHOICE EXPERIMENT IN TYPE2 DIABETES MELLITUS

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OBJECTIVES: The aim of the empirical study is to evaluate patients' preferences for different characteristics of treatment in type2 diabetes mellitus (T2DM). As T2DM treatment asks for strict adherence, patient's needs and preferences should be taken into consideration. **METHODS:** Based on a qualitative and quantitative analysis a Discrete Choice Experiment (DCE) was applied to identify patient preferences. Apart from six identical attributes (adjustment of glycated hemoglobin [HbA1c], prevention of hypoglycemia, risk of genital infection, risk of gastrointestinal problems, risk of urinary tract infection and weight change) one continuous variable of either healthy life years equivalents (HYE) or money equivalents (ME) was included. The analysis was conducted using a fractional factorial design and the statistical data analysis used random effect logit models. **RESULTS:** In total N=626 (N=318 HYE + N=308 ME) T2DM patients participated in the survey. The estimation revealed a clear dominance for prevention of hypoglycemia (coefficient: 0.937) and adjustment of HbA1c (coefficient: 0.541). The attributes, additional healthy life years (coefficient: 0.458) or additional cost (coefficient: 0.420) were in the middle rank and both of significant impact. The side effects, risk of genital infection (coefficient: 0.301), risk of gastrointestinal problems (coefficient: 0.296) and risk of urinary tract infection (coefficient: 0.241) followed in this order. Possible weight change (coefficient: 0.047) was of less importance (last rank) to the patients in this evaluation. **CONCLUSIONS:** These survey results demonstrate how much a treatment characteristic of a (hypothetical) oral diabetes treatment affects the treatment decision. Understanding how patients perceive and value different aspects of oral T2DM treatment is vital to the optimal design and evaluation of treatment options. (IB 209403011/14).

PDB131

HYE AND ME AS IDENTICAL CURRENCIES IN PREFERENCE STUDIES? A DISCRETE-CHOICE EXPERIMENT IN TYPE2 DIABETES MELLITUS

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OBJECTIVES: Only a few studies have explored deriving clinically relevant time-equivalents in comparison to money-equivalents from Discrete-Choice Experiment (DCE) data. By separating the decision model and including a) healthy life-years equivalents (HYEsurvey) or b) money equivalents (MESurvey) it could be derived if both lead to similar preference patterns and allow answering the question: Can HYE or ME serve as identical "currency" for patients with type2 diabetes mellitus (T2DM) patients? **METHODS:** A DCE, separated into two versions, was applied to identify patient preferences in oral diabetes treatment. Six identical attributes and one continuous variable of either HYE or ME were included. To be able to test the rescaling effect a scope test has been included, by using different level ranges of the time/money attribute. DCE used a fractional factorial design and random effect-logit-models (Stata, xtlogit and glamm). **RESULTS:** The estimation of the N=626 (N=318HYE+N=308ME) datasets of T2DM patients revealed similar preference patterns for both survey version were prevention of hypoglycemia (coefficient: HYE: 0.937; coefficient: ME: 0.847) and adjustment of hemoglobin A1c (HbA1c) (coefficient: HYE: 0.541; coefficient: ME: 0.649) occurred on first rank. Additional healthy life years (coefficient: HYE: 0.458) or additional cost (coefficient: ME: 0.420) ranked in middle positions. Side effects of risk of genital infection (coefficient: HYE: 0.301; coefficient: ME: 0.416), risk of gastrointestinal problems (coefficient: HYE: 0.296; coefficient: ME: 0.408) and risk of urinary tract infection (coefficient: HYE: 0.241; coefficient: ME: 0.355) followed accordingly. Possible weight change (coefficient: HYE: 0.047; coefficient: ME: 0.067) showed no significant effect in this evaluation. **CONCLUSIONS:** For the first time the methods of HYE and ME were used in one study to be able to compare patients' preferences regarding those two continuous currencies (HYE/ME) of treatment in T2DM, as well as the influence of those criteria on the patient decision patterns and patient benefit. Therefore, as HYE and ME led to comparable preference patterns, both can be discussed as summary measures of health outcome, in interchangeable ways, but further research is needed. (IB 209203011/14)

PDB132

SAGIT®: A NOVEL CLINICIAN-REPORTED OUTCOME FOR MANAGING ACROMEGALY IN CLINICAL PRACTICE

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OBJECTIVES: SAGIT is a clinician-reported outcome tool designed to help endocrinologists describe acromegaly patients and disease activity in their everyday practice. SAGIT records five elements of the disease: Signs and symptoms (S), Associated comorbidities (A), GH concentration (G - either assessed as GH nadir after oral glucose tolerance test or GH random or series), IGF-1 concentration (I) and Tumor (T). The objectives of the present work were to assess acceptability, understanding and possible uses of SAGIT with endocrinologists in real conditions. **METHODS:** Endocrinologists from France (n=2), Germany (n=1), Italy (n=2), Spain (n=2) and United States (n=2) completed SAGIT for patients with active acromegaly (n=9), controlled/stable acromegaly (n=10) and treatment-naïve patients (n=7). After completion of SAGIT, endocrinologist's reported their perception and opinion of the tool using the PRAGmatic Content and face validity Test. **RESULTS:** Endocrinologists had no difficulties completing the S, A, I and T elements of SAGIT and reporting the respective scores based on their patients' data. Both GH nadir after oral glucose load and GH random or series were informed by most endocrinologists while information for one of the two elements only is required. The majority of endocrinologists deemed the information retrieved from SAGIT useful, either for research purpose (n=7), decision-making (n=6), or response therapy assessment (n=5). They found it concise, easy to understand and unbiased (n=8), and simple, quick to complete and informative (n=7). Scores and decision rules and interpretation were among the aspects that required improvement. Scores of each elements of SAGIT vary according to patient's acromegaly status. **CONCLUSIONS:** Face and content validity of SAGIT are demonstrated, as is its applicability in clinical practice and research. It seems a promising tool for staging and classifying acromegaly patients. The planned validation study will allow the definition of scoring rules, interpretation and recommendations for managing patients in clinical practice.

PDB133

PATIENT-REPORTED OUTCOMES OF DIPEPTIDYL PEPTIDASE-4 INHIBITORS: A SYSTEMATIC REVIEW

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OBJECTIVES: To synthesize the available information on the therapeutic value of dipeptidyl peptidase-4 inhibitors (DPP-4) for the treatment of type 2 diabetes mellitus (T2DM) from the point of view of the patient-reported outcomes (PROs). **METHODS:** A systematic review was performed on International (Pub Med, WOK, Scopus, Cochrane Library) and Spanish (IBECS, MEDES) databases. Observational studies and narrative or systematic reviews regarding T2DM patients and use of DPP-4 inhibitors until June 2013 were selected. **RESULTS:** We identified 1,713 publications; 317 were excluded after duplicate review, 1,383 by title/abstract review and 9 after applying inclusion criteria (n=9). A total of 4 studies conducted in Italy (n=1), Germany (n=1), USA (n=1), and one international (including Spain) were selected. Three publications had a retrospective design and 1 was prospective. Two studies reported information about adherence/persistence, one about satisfaction and one about preferences. No information about HRQoL was identified. Patients receiving DPP-4 inhibitors were more likely to be adherent than those treated with Glucagon-like peptide-1 (GLP-1) agonists [Odds Ratio=0.40; 95% CI=0.37-0.42], sulfonylurea [OR=0.49; 95% CI=0.46-0.52] or thiazolidinediones [OR=0.54; 95% CI=0.51-0.57]; moreover, DPP-4 inhibitors were associated with a lower risk of treatment discontinuation [Hazard Ratio=0.74; 95% CI=0.71-0.76], explained by a greater tolerability and a lower risk of hypoglycemia. Combination of DPP-4 inhibitors and metformin increased patient's satisfaction by a 30%, associated with higher control of glucose levels. Most of the patients preferred DPP-4 inhibitors to GLP-1 agonists (85% vs. 15%; $p<0.001$) as first option. In the Spanish population, the proportion of patients preferring DPP-4 inhibitors was even higher (90.4% vs. 9.6%; $p<0.001$). **CONCLUSIONS:** PROs in DPP-4 inhibitors are poorly described in the literature. Nevertheless DPP-4 inhibitors are preferred as first option and are associated with higher persistence and satisfaction, mainly due to higher perception of glycemic control of glucose level and lower hypoglycemia risk.

PDB134

ASSESSMENT OF EFFECT OF CONTINUOUS SUBCUTANEOUS INSULIN INFUSION TREATMENT, INSULIN ANALOG AND HUMAN INSULIN OF CHILDREN WITH DIABETES

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OBJECTIVES: The objective of the study is to assess the cost of continuous subcutaneous insulin infusion (CSII) application for children with diabetes type 1 in Sofia, Bulgaria and to compare the changes in BMI and HbA (1c), of three groups of children - with diabetes - applying insulin pens with human insulin, with analog insulin and children with insulin pumps. **METHODS:** The study was performed from the point of view of the health insurance fund and patients. The data collected from the patients' dossier including demographics about their age, sex, weight, duration of disease and HbA (1c) and type of treatment (CSII or analogue insulin treatment with a pen device). Cost of CSII, blood glucose monitoring system and strips was calculated. The primary outcome observed was the variation in HbA (1c) and the secondary was the BMI change. 51 children were observed. The data collected from the patients' dossier including demographics about their age, sex, weight, duration of disease and HbA (1c) and type of treatment (CSII or analogue insulin treatment with a pen device). **RESULTS:** The total yearly cost weighed with the duration of the disease is 1850 Euro (30% reimbursed). The average improvement of HbA (1c) after the CSII introduction is 1.72 and the average BMI was 37.03. **CONCLUSIONS:** Improvements in glycemic control associated with CSII led to reduced HbA (1c)